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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,604	10/12/2001	Ian Colloff	05288.P008	2720

7590 01/18/2006

Robert B. O'Rourke  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP  
Seventh Floor  
12400 Wilshire Boulevard  
Los Angeles, CA 90025-1026

EXAMINER

YAO, KWANG BIN

ART UNIT	PAPER NUMBER
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2667

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/977,604	<b>Applicant(s)</b> COLLOFF ET AL.	
	<b>Examiner</b> Kwang B. Yao	<b>Art Unit</b> 2667	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-17 is/are pending in the application.
- 4a) Of the above claim(s) 8-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 2-17 have been considered but are moot in view of the new ground(s) of rejection.

### ***Election/Restrictions***

2. Newly submitted claims 8-17 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Invention I. Claims 2-7 and the original claim 1 (canceled), drawn to a networking system, classified in class 370, subclass 423.

Invention II. Claims 8-17, drawn to a system for debugging a networking system, classified in class 370, subclass 241.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because Invention I does not require the particulars of the Invention II as claimed for patentability. The subcombination has separate utility such as the features of "means for debugging the networking system, wherein the means for debugging includes a plurality of port

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mirrors”, and “comparing the traffic units received at the port mirror to the traffic units generated at the test equipment”.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 8-17 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### *Drawings*

3. The drawings are objected to because there are no descriptive legends in Figs. 4 and 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soejima et al. (US 2002/0019882) in view of Suzuki et al. (US 6,813,274).

Soejima et al. discloses a communication system comprising the following features: regarding claim 2, a plurality of ports (Fig. 3, IF unit 42 #1, 42 #n, 52#1, 52#n), each adapted to send and receive data; a switch core (Fig. 3, Switch fabric 50) having a first channel (fig. 3, box 48 #1; Fig. 7, output 63 from packet access register) configured to receive a logical input flow from each of the plurality of input ports (Fig. 3, IF unit 42 #1, 42 #n), and having a second channel (Fig. 3, box 48 #1; Fig. 7, output 63 from intermediate data) configured to receive a raw input flow from each of the plurality of input ports (Fig. 3, IF unit 42 #1, 42 #n), wherein each logical input flow is carried by its corresponding raw input flow. See pages 1-10.

Soejima et al. does not disclose the following features: regarding claim 2, and a plurality of port mirrors selectable from the plurality of ports, wherein each of the plurality of port mirrors is configured to produce a duplicate copy of at least one of the logical input flow and the raw input flow available at a selected port.

Suzuki et al. discloses a communication system comprising the following features: regarding claim 2, and a plurality of port mirrors selectable from the plurality of ports (FIG. 3, OUTPUT PORT 1, 2, 3, 4), wherein each of the plurality of port mirrors is configured to produce

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a duplicate copy of at least one of the logical input flow (FIG. 3, INPUT 1) and the raw input flow available at a selected port (FIG. 3, OUTPUT PORT 3). See column 1-12. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system Soejima et al., by using the features, as taught by Suzuki et al., in order to provide an efficient data communication system by reducing the amount of time for scheduling and switching packets. See Suzuki et al., column 8, lines 55-57.

6. Claims 3,4,5,6,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soejima et al. (US 2002/0019882) in view of Suzuki et al. (US 6,813,274) as applied to claim 2 above, and further in view of Calamvokis et al. (US 5,592,476).

Soejima et al. and Suzuki et al. disclose the claimed limitations above. Moreover, Soejima et al. discloses a communication system comprising the following features: regarding claim 5, wherein the switch core (Fig. 3, Switch fabric 50) comprises a semiconductor chip; regarding claim 6, wherein the switch core (Fig. 3, Switch fabric 50) comprises a computer-readable medium having computer-executable instructions ([0106], [0109], [0110]). See pages 1-10. Suzuki et al. discloses a communication system comprising the following features: regarding claim 4, wherein the switch core comprises a cross bar switch (FIG. 3, NXM CROSS BAR SWITCH 300); regarding claim 7, a scheduling circuit (SCHED. 2 338), wherein the scheduling circuit (SCHED. 2 338) is configured to establish connections for each output node that allows an input traffic unit to be passed over each established connection (see column 6, line 33 to column 8, line 56). See column 1-12.

Soejima et al. and Suzuki et al. do not disclose the following features: regarding claim 3, an ingress channel adapted to send input flow data to the switch core; an egress channel adapted

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to receive output flow data from the switch core; and a multiplexer adapted to provide raw input flow to at least one of the switch core and the egress channel.

Calamvokis et al. discloses a communication system comprising the following features: regarding claim 3, an ingress channel (FIG. 3, channel from MUX to PORT 21) adapted to send input flow data to the switch core (FIG. 3, N PORT SWITCH CORE 20); an egress channel (FIG. 3, channel from PORT 21 to DEMUX) adapted to receive output flow data from the switch core (FIG. 3, N PORT SWITCH CORE 20); and a multiplexer (FIG. 3, MUX) adapted to provide raw input flow to at least one of the switch core and the egress channel. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system Soejima et al. and Suzuki et al., by using the features, as taught by Calamvokis et al., in order to provide an efficient data communication system by having flexible scheduling. See column 3, lines 52.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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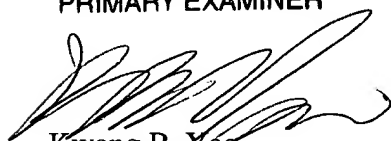
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 571-272-3182. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO  
PRIMARY EXAMINER



Kwang B. Yao  
January 16, 2006